Arizona State Board of Education

Fiscal Impact Study: Proposal to Increase High School Graduation Requirements

Arizona State Board of Education Fiscal Impact Study - Increased Graduation Requirements December 6, 2007

INTRODUCTION

Pursuant to Arizona Revised Statutes (ARS) §15-203 A (13), the State Board of Education (SBE) may not adopt any changes to the prescribed minimum course of study or competency requirements for the graduation of high school students that creates a fiscal impact on school capital costs. Currently, the SBE is considering increasing the graduation requirements in the areas of mathematics, science and social studies (Attachment 1).

No fiscal impact is expected from these increases. The SBE conducted a survey of all high schools, both traditional public high schools and charter high schools, to assess any potential fiscal impact on capital costs. An analysis of Arizona's school facilities regulations indicate that classroom space and equipment needs for math and social studies courses are accounted for strictly on a per student basis. Therefore, only questions regarding science instruction were included due to the specialized facilities, fixtures and equipment required for some science curriculum.

SURVEY & RESPONSES

The survey (Attachment 2) was distributed to 508 high schools statewide, 280 traditional public high schools and 228 charter high schools. It asked questions regarding current science instruction and laboratory classroom facilities and utilization. The survey also included questions regarding teacher qualifications and salary. The teacher data is not germane to the current fiscal impact study but was included to compile data regarding possible teacher shortages. The SBE received 113 responses, a 22.2% response rate. Participating schools include schools from all counties statewide except La Paz. Responding schools had enrollments ranging from very small (less than 50 students) to very large (more than 2,500 students). See distribution table below:

<u>Enrollment</u>	Number of Schools
0-50	14
51-150	31
151-500	31
501-1500	14
1501-2500	15
2501-3500	8

ANALYSIS

ARS \$15-2001 F requires the School Facilities Board (SFB) to adopt rules establishing minimum school facility adequacy guidelines (minimum guidelines) that delineate the quality and quantity of school buildings, facilities and equipment necessary and appropriate enabling students to achieve the academic standards prescribed by the SBE pursuant to ARS 15-203, thus any changes to these academic standards could potentially impact the minimum guidelines. The rules adopted by the SFB (Attachment 3) allocate science facilities and equipment on a per student basis, not based on the number of credits of science required by the academic standards. Therefore, increasing the science requirements has no direct impact on the minimum guidelines. Any impact would result from the schools' ability to deliver science instruction without additional facilities and equipment. The survey responses support that no additional facilities or equipment is necessary.

Although 74.3% of participating schools reported having laboratory classrooms and equipment, 24.7% reported having no laboratory classrooms and equipment. This data demonstrates that schools are able to meet the current instructional requirements for science without laboratory classrooms and equipment. Additionally, 47.7% of responding schools reported providing science instruction using alternate means (no lab), showing that even those schools that have laboratory classrooms choose alternative delivery methods for some science instruction. The survey responses further demonstrate that schools are capable of offering courses in chemistry, physics and biology through alterative means. This is particularly relevant in light of the specific science requirements delineated in the proposed Regents' Diploma.

Of those schools that have laboratory classrooms, only 44% of them utilize those classrooms for science instruction during each instructional period while 55.9% have laboratory classrooms available allowing for additional science instruction if the school should so choose.

The survey responses revealed that for school year 2006-2007, 59% of the participating schools graduated students with more than the required number of science credits. Of all participating schools, 57% of students graduating in 2007 did so with more than the required number of science credits. This data exhibits that schools routinely graduate students who exceed the existing science requirements without any additional facilities or equipment.

CONCLUSION

Increasing the graduation requirements for Arizona high school students in science will have no fiscal impact on school capital costs. This conclusion is supported by current high school practices of facility utilization, alternate instruction methods and student behavior.

R7-2-302.01 Minimum Course of Study and Competency Requirements for Graduation from High School for the Graduation Class of 2012

The Board prescribes the minimum course of study and competency requirements as outlined in subsections (1) and (2) and receipt of a passing score on the reading, mathematics, and writing portions of the AIMS (Arizona's Instrument to Measure Standards) assessment for the graduation of pupils from high school or issuance of a high school diploma, effective for the graduation class of 2012.

- 1. Subject area course requirements. The Board establishes 20 credits as the minimum number of credits necessary for high school graduation. Students shall obtain credits for required subject areas as specified in subsections (1)(a) through (e) based on completion of subject area course requirements or competency requirements. At the discretion of the local school district governing board or charter school, credits may be awarded for completion of elective subjects specified in subsection (1)(f) based on completion of subject area course requirements or competency requirements. The awarding of a credit toward the completion of high school graduation requirements shall be based on successful completion of the subject area requirements prescribed by the State Board, local school district governing boards and charter schools as follows:
- a. Four credits of English or English as a Second Language, which shall include but not be limited to the following: grammar, writing, and reading skills, advanced grammar, composition, American literature, advanced composition, research methods and skills and literature. One-half credit of the English requirement shall include the principles of speech and debate but not be limited to those principles.
- b. Three credits in social studies to include the following:
- i. One credit of American history, including Arizona history;
- ii. One credit of world history/geography.
- iii. One-half credit of American government; and
- iv. One-half credit of economics.
- c. Three credits of mathematics. The course content for at least two of the mathematics credits shall include Number Sense and Operations; Data Analysis, Probability and Discrete Mathematics; Patterns, Algebra and Functions; Geometry and Measurement; and Structure and Logic in preparation for proficiency at the high school level on the AIMS test and shall be taken consecutively beginning with the ninth grade. The third credit shall include significant math content as determined by the local school district governing board or charter school. Courses successfully completed in eighth grade that meet the high school mathematics credit requirements may be applied toward satisfying those requirements.
- d. Two credits of science in preparation for proficiency at the high school level on the AIMS test.
- e. One credit of fine arts or career and technical education and vocational education.
- f. Seven credits of additional courses prescribed by the local school district governing board or charter school.
- g. A credit or partial credit may apply toward more than one subject area but shall count only as one credit or partial credit toward satisfying the 20 required credits.
- 2. Credits earned through correspondence courses to meet graduation requirements shall be taken from an accredited institution as defined in R7-2-601. Credits earned thereby shall be limited to four, and only one credit may be earned in each of the following subject areas:
- a. English as described in subsection (1)(a) of this rule.
- b. Social Studies.
- c. Mathematics.
- d. Science.
- 3. Delivery of distance education. In addition to traditional methods of course delivery, courses may also be offered through distance education. Distance education does not include correspondence courses. Distance education is defined as instructional-learning arrangements in which the distance education instructor and the student are separated geographically. Instruction is delivered by means of telecommunications technologies such as satellite, microwave, telephone, cable, fiber optics. The instruction supplements or comprises the entire course content and provides for two-way interactive communications between the instructor and the student during the time of the instruction. Communication or interaction occurs through the use of technologies such as voice, video or computer-mediated communications.
- a. Distance education providers shall register with the Department of Education and satisfy the following requirements:
- i. Be accredited or affiliated with an accredited institution as defined in R7-2-601.
- ii. Validate that the instructor of the distance education program:
- (1) Possesses a current Arizona teaching certificate valid for the level and subject of the instruction to be taught; or
- (2) Possesses a current teaching certificate from the recognized certifying authority of the sending location valid for the level and subject of the instruction to be taught; or
- (3) Is employed by or affiliated with, in the content area of instruction, an accredited institution as

defined in R7-2-601.

- b. Distance education may be used as a part of the instructional program. School districts shall ensure that: i. Only those distance education providers registered with the Department of Education are used to provide distance education; and
- ii. The teaching partners who assist the students in receiving the instruction onsite have instructional and technical facilitator training and are supervised by an individual certified pursuant to R7-2-601 et seq.
- 4. Local school district governing boards or charter schools may grant to career and technical education and vocational education program completers a maximum of 3 1/2 credits to be used toward the Board English, mathematics, science, or economics credit requirements for graduation, subject to the following restrictions:

 a. The Board has approved the career and technical education and vocational education program for equivalent credit to be used toward the Board English, mathematics, science or economics credit requirements for graduation.
- b. A credit or partial credit may apply toward more than one subject area but shall count only as one credit or partial credit toward satisfying the 20 required credits

5. Competency requirements.

a. The awarding of a credit toward the completion of high school graduation requirements shall be based on the successful completion of State Board-adopted academic standards for subject areas listed in subsections (1)(a) through (1)(e) and the successful completion of the competency requirements for the elective subjects specified in subsection (1)(f). Competency requirements for elective subjects as specified in subsection (1)(f) shall be the academic standards adopted by the State Board. If there are no adopted academic standards for an elective subject, the local school district governing board or charter school shall be responsible for developing and adopting competency requirements for the successful completion of the elective subject.

b. The determination and verification of student accomplishment and performance shall be the responsibility of the subject area teacher.

- c. Upon request of the student, the local governing board shall provide the opportunity for the student to demonstrate competency in the subject areas listed in subsections (1)(a) through (1)(f) above in lieu of classroom time.
- 6. The local school district governing board or charter school shall be responsible for developing a course of study and graduation requirements for all students placed in special education programs in accordance with A.R.S. Title 15, Chapter 7, Article 4 and A.A.C. R7-2-401 et seq. Students placed in special education classes, 9-12, are eligible to receive a high school diploma upon completion of those graduation requirements, but reference to special education placement may be placed on the student's transcript or permanent file.

R7-2-302.02 Minimum Course of Study and Competency Requirements for Graduation from High School Beginning with the Graduation Class of 2013

The Board prescribes the minimum course of study and competency requirements as outlined in subsections (1) and (2) and receipt of a passing score on the reading, mathematics, and writing portions of the AIMS (Arizona's Instrument to Measure Standards) assessment for the graduation of pupils from high school or issuance of a high school diploma, effective for the graduation class of 2013.

- 1. Subject area course requirements. The Board establishes 22 credits as the minimum number of credits necessary for high school graduation. Students shall obtain credits for required subject areas as specified in subsections (1)(a) through (e) based on completion of subject area course requirements or competency requirements. At the discretion of the local school district governing board or charter school, credits may be awarded for completion of elective subjects specified in subsection (1)(f) based on completion of subject area course requirements or competency requirements. The awarding of a credit toward the completion of high school graduation requirements shall be based on successful completion of the subject area requirements prescribed by the State Board, local school district governing boards and charter schools as follows:
- a. Four credits of English or English as a Second Language, which shall include but not be limited to the following: grammar, writing, and reading skills, advanced grammar, composition, American literature, advanced composition, research methods and skills and literature. One-half credit of the English requirement shall include the principles of speech and debate but not be limited to those principles.
- b. Three credits in social studies to include the following:
 i. One credit of American history, including Arizona history;
- ii. One credit of world history/geography.
- iii. One-half credit of American government; and
- iv. One-half credit of economics.
- c. Four credits of mathematics to minimally include the following:
- i. Two credits containing course content covering the following areas in preparation for proficiency at the high school level on the AIMS test: Number Sense and Operations; Data Analysis, Probability and Discrete Mathematics; Patterns, Algebra and Functions; Geometry and Measurement; and Structure and

- Logic. These credits shall be taken consecutively beginning with the ninth grade.
- ii. One credit covering Algebra II or course content equivalent to Algebra II. Courses meeting this requirement may include, but are not limited to, career and technical education and vocational education, economics, science, and arts courses as determined by the local school district governing board or charter school.
- iii. One credit that includes significant math content as determined by the local school district governing board or charter school.
- iv. Courses successfully completed in the eighth grade that meet the high school mathematics credit requirements may be applied toward satisfying those requirements.
- v. The mathematics requirements may be modified for students using a personal curriculum pursuant to R7-2-302.03.
- d. Three credits of science in preparation for proficiency at the high school level on the AIMS test.
- e. One credit of fine arts or career and technical education and vocational education.
- f. Seven credits of additional courses prescribed by the local school district governing board or charter school.
- g. A credit or partial credit may apply toward more than one subject area but shall count only as one credit or partial credit toward satisfying the 22 required credits
- 2. Credits earned through correspondence courses to meet graduation requirements shall be taken from an accredited institution as defined in R7-2-601. Credits earned thereby shall be limited to four, and only one credit may be earned in each of the following subject areas:
- a. English as described in subsection (1)(a) of this rule.
- b. Social Studies.
- c. Mathematics.
- d. Science.
- 3. Delivery of distance education. In addition to traditional methods of course delivery, courses may also be offered through distance education. Distance education does not include correspondence courses. Distance education is defined as instructional-learning arrangements in which the distance education instructor and the student are separated geographically. Instruction is delivered by means of telecommunications technologies such as satellite, microwave, telephone, cable, fiber optics. The instruction supplements or comprises the entire course content and provides for two-way interactive communications between the instructor and the student during the time of the instruction. Communication or interaction occurs through the use of technologies such as voice, video or computer-mediated communications.
- a. Distance education providers shall register with the Department of Education and satisfy the following requirements:
- i. Be accredited or affiliated with an accredited institution as defined in R7-2-601.
- ii. Validate that the instructor of the distance education program:
- (1) Possesses a current Arizona teaching certificate valid for the level and subject of the instruction to be taught; or
- (2) Possesses a current teaching certificate from the recognized certifying authority of the sending location valid for the level and subject of the instruction to be taught; or
- (3) Is employed by or affiliated with, in the content area of instruction, an accredited institution as defined in R7-2-601.
- b. Distance education may be used as a part of the instructional program. School districts shall ensure that:
- i. Only those distance education providers registered with the Department of Education are used to provide distance education; and
- ii. The teaching partners who assist the students in receiving the instruction onsite have instructional and technical facilitator training and are supervised by an individual certified pursuant to R7-2-601 et seq.
- 4. Local school district governing boards or charter schools may grant to career and technical education and vocational education program completers a maximum of five and one-half credits to be used toward the Board English, mathematics, science, or economics credit requirements for graduation, subject to the following restrictions:
- a. The Board has approved the career and technical education and vocational education program for equivalent credit to be used toward the Board English, mathematics, science, or economics credit requirements for graduation.
- b. A credit or partial credit may apply toward more than one subject area but shall count only as one credit or partial credit toward satisfying the 22 required credits
- 5. Competency requirements.
- a. The awarding of a credit toward the completion of high school graduation requirements shall be based on the successful completion of State Board-adopted academic standards for subject areas listed in subsections (1)(a) through (1)(e) and the successful completion of the competency requirements for the elective subjects specified in subsection (1)(f), Competency requirements for elective subjects as

specified in subsection (1)(f) shall be the academic standards adopted by the State Board. If there are no adopted academic standards for an elective subject, the local school district governing board or charter school shall be responsible for developing and adopting competency requirements for the successful completion of the elective subject.

b. The determination and verification of student accomplishment and performance shall be the responsibility of the subject area teacher.

c. Upon request of the student, the local school district governing board or charter school shall provide the opportunity for the student to demonstrate competency in the subject areas listed in subsections (1)(a) through (1)(f) above in lieu of classroom time.

6. The local school district governing board or charter school shall be responsible for developing a course of study and graduation requirements for all students placed in special education programs in accordance with A.R.S. Title 15, Chapter 7, Article 4 and A.A.C. R7-2-401 et seq. Students placed in special education classes, 9-12, are eligible to receive a high school diploma upon completion of those graduation requirements, but reference to special education placement may be placed on the student's transcript or permanent file.

R7-2-302.03 Personal Curriculum

1. Definitions

a. "Personal Curriculum" means a documented process that may be used to modify the high school graduation requirements for mathematics delineated in R7-2-302.02(1)(c). A student may use a personal curriculum to modify the Algebra II requirement delineated in R7-2-302.02(1)(c)(ii) and reduce the credit requirements for mathematics from four to three credits. A student who successfully completes his or her personal curriculum meets the requirements for high school graduation.

b. "Development Team" means a team that develops a personal curriculum for a student and consists of the student, the parent or legal guardian of the student, and a school counselor or principal or their designee. A school principal may add additional members to the development team as he or she deems appropriate.

2. A student is eligible for a personal curriculum if he or she meets the following criteria: a. The student has successfully completed the mathematics requirements delineated in R7-2-302.02(1)(c)(i); and

b. Despite the student's successful completion of the mathematics requirements delineated in R7-2-302.02(1)(c)(i), the development team determines that the student demonstrates a need to modify the requirement delineated in R7-2-302.02(1)(c)(ii) for Algebra II or its equivalent course content. 3. The requirements for a personal curriculum are as follows:

a. An eligible student may only modify the mathematics requirement delineated in R7-2-

302.02(1)(c)(ii) for Algebra II or its equivalent course content;

b. In lieu of successfully completing Algebra II or its equivalent course content, an eligible student shall successfully complete at least one credit in mathematics that shall include significant mathematics content as determined by the local school district governing board or charter school;

c. An eligible student shall successfully complete a course in mathematics in his or her senior year.

4. The procedures for developing and implementing a personal curriculum are as follows:

a. The parent or legal guardian of a student, an emancipated student, or a student with permission from his or her parent or legal guardian may request a personal curriculum in a manner prescribed by the local school district governing board or charter school.

b. Upon receipt of a request for a personal curriculum made pursuant to subsection (4)(a), the local school district or charter school shall verify that the student successfully completed the mathematics requirements delineated in R7-2-302.02(1)(c)(i) and, upon verification, shall convene a development team.

c. The development team shall:

i. Verify that the student demonstrates a need to modify the requirement delineated in R7-

2-302.02(1)(c)(ii)for Algebra II or its equivalent course content.

ii. Identify an appropriate alternative mathematics course or courses to modify the requirement for Algebra II or its equivalent course content.

iii. Develop a written personal curriculum plan that includes the alternative mathematics course or courses identified in subsection (4)(c)(ii) and a plan for monitoring student progress toward successfully completing the alternative mathematics course or courses. In developing the personal curriculum plan the development team shall consider how the proposed modifications maintain the integrity of the high school diploma and enable the student to achieve his or her post-secondary education and career goals;

iv. The development team may modify the personal curriculum plan based upon the development team's evaluation of the student's progress,

5. The Superintendent of Public Instruction shall monitor a school district or charter school if there is reason to believe that the school district or charter school is allowing modifications inconsistent with the requirements delineated in this rule.

R7-2-302.04 Minimum Course of study and Competency Requirements for Graduation from High School. Regents' Diploma

The Board prescribes the minimum course of study and competency requirements as outlined in subsections (1) and (2) for the graduation of pupils from high school. The Board establishes 20 credits as the minimum number of credits necessary for high-school graduation effective for the graduation class of 1996. Students shall obtain credits for required subject areas as specified in subsection (1)(a)(i) through (vi) based on completion of subject area course requirements or competency requirements. At the discretion of the local governing board, credits may be awarded for completion of elective subjects specified in subsection (1)(a)(vii) based on completion of subject area course requirements or competency requirements.

- 1. Subject area course requirements.
- a. The awarding of a credit toward the completion of high school graduation requirements shall be based on successful completion of the subject area requirements prescribed by the State Board and local governing board as follows:
- i. Four credits of English or English as a Second Language, which shall include but not be limited to the following: grammar, writing, and reading skills, advanced grammar, composition, American literature, advanced composition, research methods and skills and literature. One half credit of the English requirement shall include the principles of speech and debate but not be limited to those principles.
- ii. One and one half credits in instruction in the essentials, sources and history of the constitutions of the United States and Arizona and instruction in American institutions and ideals and in the history of Arizona.
- iii. One credit of world history/geography.
- iv. Two credits of mathematics.
- v. Two credits of science.
- vi. One credit of fine arts or vocational education.
- vii. Eight and 1/2 credits of additional courses prescribed by the local governing board subject to the approval of the State Board pursuant to A.R.S. § 15-341(A)(7).
- b. Credits earned through correspondence courses to meet graduation requirements shall be taken from an accredited institution as defined in R7-2-601. Credits earned thereby shall be limited to 4, and only one credit may be earned in each of the following subject areas:
- i. English as described in subsection (1)(a)(i) of this rule.
- ii. Social Studies.
- iii. Mathematics.
- iv.-Science.
- c. Delivery of distance education. In addition to traditional methods of course delivery, courses may also be offered through distance education. Distance education does not include correspondence courses. Distance education is defined as instructional learning arrangements in which the distance education instructor and the student are separated geographically. Instruction is delivered by means of telecommunications technologies such as satellite, microwave, telephone, cable, fiber optics. The instruction supplements or comprises the entire course content and provides for two-way interactive communications between the instructor and the student during the time of the instruction. Communication or interaction occurs through the use of technologies such as voice, video or computermediated communications.
- i. Distance education-providers shall register with the Department of Education and satisfy the following requirements:
- (1) Be accredited or affiliated with an accredited institution as defined in R7-2-601.
- (2) Validate that the instructor of the distance education program:
- (a) Possesses a current Arizona teaching certificate valid for the level and subject of the instruction to be taught; or
- (b) Possesses a current teaching certificate from the recognized certifying authority of the sending location valid for the level and subject of the instruction to be taught; or
- (e) Is employed by or affiliated with, in the content area of instruction, an accredited institution as defined in R7-2-601.
- ii. Distance education may be used as a part of the instructional program. School districts shall ensure that:
- (1) Only those distance education providers registered with the Department of Education are used to provide distance education; and
- (2) The teaching partners who assist the students in receiving the instruction onsite have

instructional and technical facilitator training and are supervised by an individual certified pursuant to R7-2-601 et seq.

- d. Local governing boards may grant to vocational technological education program completers a maximum of 3 1/2 credits to be used toward the Board English, mathematics or science credit requirements for graduation, subject to the following restrictions.
- i. The Board has approved the vocational-technological education program for equivalent credit to be used toward the Board English, mathematics or science credit requirements for graduation.
- ii. Only one credit in each of English, mathematics or science may be granted.
- iii. For vocational-technological programs in which only one credit is offered, either vocational or English, mathematics or science credit may be granted.
- iv. For vocational-technological programs in which two or more credits are offered, only one credit may be used for English, mathematics or science.
- 2. Competency requirements.
- a. The awarding of a credit toward the completion of high school graduation requirements shall be based on the successful completion of State Board-adopted essential skills requirements for subject areas listed in subsection (1)(a)(i) through (vi) and the successful completion of the competency requirements for the elective subjects specified in subsection (1)(a)(vii). Competency requirements for elective subjects as specified in subsection (1)(a)(vii) shall be the essential skills adopted by the State Board. If there are no adopted essential skills for an elective subject, the local governing board shall be responsible for developing and adopting competency requirements for the successful completion of the elective subject. b. The determination and verification of student accomplishment and performance shall be the responsibility of the subject area teacher.
- c. Upon request of the student, the local governing board shall provide the opportunity for the student to demonstrate competency in the subject areas listed in subsection (1)(a)(i) through (vi) above in lieu of classroom time.
- 3. The local governing board of each school district shall be responsible for developing a course of study and graduation requirements for all students placed in special education programs in accordance with A.R.S. Title 15, Chapter 7, Article 4 and A.A.C. R7-2-401 et seq. Students placed in special education classes, 9-12, are eligible to receive a high school diploma upon completion of graduation requirements, but reference to special education placement may be placed on the student's transcript or permanent file.

A local school district governing board or charter school shall offer its students a Regents' Diploma. The Regents' Diploma is an optional graduation pathway that aligns with the credit requirements for admission to universities governed by the Arizona Board of Regents. Completion of the requirements for a Regents' Diploma does not guarantee admission to any university governed by the Arizona Board of Regents. A student may receive a Regents' Diploma if the student successfully completes the subject area course requirements or competency requirements as follows:

- 1. Four credits of English or English as a Second Language, which shall include but not be limited to the following: grammar, writing, and reading skills, advanced grammar, composition, American literature, advanced composition, research methods and skills and literature. One-half credit of the English requirement shall include the principles of speech and debate but not be limited to those principles.
- 2. Three credits in social studies to include the following:
- a. One credit of American history, including Arizona history;
- b. One credit of world history/geography.
- c. One-half credit of American government; and
- d. One-half credit of economics.
- 3. Four credits of mathematics to include courses covering Algebra I, Geometry, Algebra II and an additional mathematics course with an Algebra II prerequisite.
- 4. Three credits of science to include at least one credit in three of the following areas:
- a. Biology
- b. Chemistry
- c. Physics
- d. Earth Science
- e. An advanced placement or honors course in a lab science may used to cover the third science credit
- 5. One credit of fine arts.
- 6. Two credits of World Languages. These credits must be obtained in courses covering the same language.
- 7. Five credits of additional courses prescribed by the local school district governing board or charter school.
- 8. An earned credit shall apply toward only one subject area requirement delineated in R7-2-302.04(1) through (7).

School CTDS

- 1 Number of students in grades 9-12.
- Please indicate, for each of the past three school years, the number of graduates and the number of students graduating with more than the required number of science credits.
- 3 Please list science classes offered.
- Does your school facility include laboratory classrooms (classroom space with science fixtures and equipment)?
- 5 Number of laboratory classrooms.
- 6 Number of instructional periods in a school day.
- Number of instructional periods each laboratory classroom is used for science instruction in a school day.
- B Does your school use any alternative delivery methods for science instruction (methods not using a traditional lab environment)?
- 8a If yes, please explain each alternative delivery method used.
- 9 Number of teachers providing science instruction.
- Number of teachers providing science instruction who are certified in the subject area they are teaching.
- Number of teachers providing science instruction who are Highly Qualified in the subject area they are teaching.
- Does your school district provide additional salary incentives for teachers certified in science?
- 12a If yes, please provide additional salary amount.

Arizona School Facilities Board Rules & Policies

R7-6-245. Science Facilities

- A. A school facility with students in grades 5 through 12 shall have classroom space to deliver practical science instruction, or classroom space for an alternate science delivery method.
- 1. For grades five through eight no space is required beyond the academic classroom requirement. For grades 9 through 12, four square feet per student of practical and instructional science space is required. The space shall not be smaller than the average classroom at the facility. This space is included in the academic classroom requirement and may be used for other instruction.
- B. A school facility with students in grades 5 through 12 that delivers practical science instruction shall have science fixtures and equipment, in accordance with R7-6-246 as modified from time to time. If an alternate science delivery method is used by a district, a school facility shall have science fixtures and equipment for students in grades 5 through 12 that are an alternate equivalent to the science fixtures and equipment identified in R7-6-246.

Historical Note

New Section made by exempt rulemaking at 8 A.A.R. 287, effective June 7, 2001 (Supp. 01-4).

R7-6-246. Equipment List for Science Facilities

- A. Science facilities for students in grades 9 through 12 shall have the following fixtures and equipment:
- 1. One demonstration table with non-corrosive surface per 250 students.
- 2. Six laboratory stations with a non-corrosive surface per 250 students.
- 3. One fume hood.
- 4. One chemical storage unit per 1,000 students.
- 5. One eye wash/shower per 250 students.
- 6. One dissecting microscope per 25 students, minimum of the lesser of 12 or one-half of the number of eligible students.
- 7. One refrigerator.
- B. Science facilities for students in grades five through 12 shall have the following fixtures and equipment:
- 1. One sink per 250 students.
- 2. One compound microscope per 25 students, minimum of the lesser of 12 or one-half of the number of eligible students.
- 3. One balance per 250 students.

Historical Note

New Section made by exempt rulemaking at 8 A.A.R. 287, effective June 7, 2001 (Supp. 01-4).